Amendment to the Claims:

1. (Withdrawn) A targeting construct comprising:
   (a) a first polynucleotide sequence homologous to a low density lipoprotein-related protein 5gene;
   (b) a second polynucleotide sequence homologous to the low density lipoprotein-related protein 5 gene; and
   (c) a selectable marker.
2. (Withdrawn) The targeting construct of claim 1, wherein the targeting construct further comprises a screening marker.
3. (Withdrawn) A method of producing a targeting construct, the method comprising:
   (a) providing a first polynucleotide sequence homologous to a low density lipoprotein-related protein 5 gene;
   (b) providing a second polynucleotide sequence homologous to the low density lipoprotein-related protein 5;
   (c) providing a selectable marker; and
   (d) inserting the first sequence, second sequence, and selectable marker into a vector, to produce the targeting construct.
4. (Withdrawn) A method of producing a targeting construct, the method comprising:
   (a) providing a polynucleotide comprising a first sequence homologous to a first region of a low density lipoprotein-related protein 5 gene and a second sequence homologous to a second region of a low density lipoprotein-related protein 5 gene;
   (b) inserting a positive selection marker in between the first and second sequences to form the targeting construct.

Claims 5-12 (Canceled)

13. (Withdrawn) A method of identifying an agent that modulates the expression of low density lipoprotein-related protein 5, the method comprising:
   (a) providing a cell comprising a disruption in a low density lipoprotein-related protein 5 gene;
   (b) contacting the cell with an agent; and
   (c) determining whether expression of the low density lipoprotein-related protein 5 is modulated.

14. (Withdrawn) A method of identifying an agent that modulates the function of a low density lipoprotein-related protein 5 gene, the method comprising:
    (a) providing a cell comprising a disruption in a low density lipoprotein-related protein 5 gene;
    (b) contacting the cell with an agent; and
    (c) determining whether the function of the low density lipoprotein-related protein 5 gene is modulated.
15. (Withdrawn) The method of claim 13 or claim 14, wherein the cell is derived from the non-human transgenic animal of claim 8.
16. (Withdrawn) An agent identified by the method of claim 11, claim 12, claim 13, or claim 14.
17. (Currently Amended) The ~~A~~ transgenic mouse of claim 26 wherein said mouse is homozygous for said null allele; ~~whose genome comprises a homozygous disruption in an endogenous low-density lipoprotein-related protein 5 gene~~, said mouse exhibiting at least one of the following phenotypes relative to a wild-type control mouse: retinal degeneration, increased anxiety and~~or~~ hypoactivity.
18. (Previously Presented) The transgenic mouse of claim 17, wherein the increased anxiety is characterized by a decrease in time spent in a central region of an open field environment, relative to a wild-type mouse.
19. (Previously Presented) The transgenic mouse of claim 17, wherein the hypoactivity is characterized by a decrease in total distance traveled in an open field environment, relative to a wild-type mouse.
20. (Currently amended) A cell or tissue ~~obtained~~ isolated from ~~the~~ a transgenic mouse of claim ~~17~~26.
21. (Currently amended) ~~A~~ The transgenic mouse of claim 26 wherein said mouse is heterozygous for said null allele~~whose genome comprises a heterozygous disruption in an endogenous low-density lipoprotein-related protein 5 gene, wherein the disruption in a homozygous state inhibits production of functional low-density lipoprotein-related protein 5 resulting in a transgenic mouse exhibiting retinal degeneration~~.

Claims 22, 23 (Canceled)

24. (Currently amended) A method of producing ~~a~~ the transgenic mouse of claim 26~~whose genome comprises a disruption in an endogenous low density lipoprotein-related protein 5 gene~~, the method comprising:

    a. providing a mouse embryonic stem cell comprising a disruption in an endogenous low density lipoprotein-related protein 5 gene; and
    b. introducing the mouse embryonic stem cell into a mouse blastocyst;
    c. implanting the resulting blastocyst into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to a chimeric mouse; and
    d. breeding the chimeric mouse to produce the transgenic mouse~~;~~

    ~~e.wherein where the disruption is homozygous, the transgenic mouse lacks production of functional low-density lipoprotein-related protein 5 and exhibits at least one of the following: retinal degeneration, increased anxiety or hypoactivity~~.

Claim 25 (Canceled)

26. (New) A transgenic mouse whose genome comprises a null endogenous low density lipoprotein-related protein 5 (LPR5) allele, said null allele comprising exogenous DNA.
27. (New) The transgenic mouse of claim 26 wherein said exogenous DNA comprises a gene encoding a selection marker.
28. (New) The transgenic mouse of claim 27 wherein said gene is a neomycin resistant gene.
29. (New) The transgenic mouse of claim 26 wherein said exogenous DNA comprises a PGK-*neo* fusion gene having two *lacO* sites.
30. (New) The transgenic mouse of claim 26 wherein the endogenous LPR5 allele encodes for a protein comprising the amino acid sequence of SEQ ID NO:2.
31. (New) A method of identifying an agent capable of modulating activity of a LPR5 gene or LPR5 gene expression product, the method comprising:

    a. administering a putative agent to the transgenic mouse of claim 26;
    b. administering the agent to a wild-type control mouse; and
    c. comparing a physiological response of the transgenic mouse with that of the control mouse;

    wherein a difference in the physiological response between the transgenic mouse and the control mouse is an indication that the agent is capable of modulating activity of the gene or gene expression product.